



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,288	03/30/2001	Kevin L. Farley	2479.2052-000.	6799
21005	7590	10/04/2004	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C.			HOM, SHICK C	
530 VIRGINIA ROAD			ART UNIT	
P.O. BOX 9133			PAPER NUMBER	
CONCORD, MA 01742-9133			2666	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/823,288

Applicant(s)

FARLEY ET AL.

Examiner

Shick C Hom

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/30/01 & 9/25/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date Z.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Art Unit: 2666

DETAILED ACTION

Drawings

1. New drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings are informal. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Objections

2. Claims 1-6 and 8-9 are objected to because of the following informalities: In claim 1 line 5, the words "the subscriber" seem to refer back to "the subscriber unit" recited in claim 1 line 4. If this is true, it is suggested changing "the subscriber" to ---the subscriber unit---. In claims 2 and 3 line 1 delete "A system" and insert ---The system---, because they're reciting the system of claim 1; likewise in claim 5 line 1 delete "A gateway" and insert ---The gateway---. In claim 3 lines 2, 4, 5, the words "a succession of data packets," "a first portion," and "a second portion" seem to refer back to the

Art Unit: 2666

"succession of data packets," "first portion," and "second portion" recited in claim 1 lines 12, 14, and 15, respectively. If this is true, it is suggested changing "a succession of data packets," "a first portion," and "a second portion" to ---the succession of data packets---, ---the first portion---, and ---the second portion---, respectively; likewise, in claim 4 line 4, delete "a succession" and insert ---the succession---. In claims 1 line 14, claim 3 lines 4-5, claims 4, 6 line 6, claims 7, 8, 9 line 5 before the words "the corresponding byte" insert ---the sequence number of---, for clarity, as in claim 7 line 5. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 lines 14, 15; claims 4, 6 lines 6, 7; claims 7, 8, 9 lines 5, 6 which recite "the corresponding byte" and "the receiving window" lack clear antecedent basis because no corresponding byte nor receiving window have been previously recited in the claims and therefore the limitation is not clearly understood. In claim 2 line 2 which recite "the first

Art Unit: 2666

monitoring means" lacks clear antecedent basis. In claim 3 lines 8-9 which recite "the second monitoring means" lacks clear antecedent basis.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2666

6. Claims 1, 2, and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (6,601,101) in view of Cohen (4,527,267).

Regarding claims 1, 2, and 4-9:

Lee et al. disclose the system for interconnecting an end user machine with a server for the transmission of data (see col. 7 lines 35-58 which recite the server): first and second base stations connected to the server (see col. 3 lines 33-65 which recite the first and second devices for handoff clearly corresponds to the first and second base stations); a subscriber unit connected to the end user machine and normally defining a first wireless path with the first base station, the subscriber defining a second wireless transmission path with the second base station when handed off from the first station to the second base station (see Fig. 3, the client which corresponds to the subscriber unit and the first and second device which corresponds to the first and second base stations, the second path with the second device and the first path with the first device and col. 7 lines 11-15 which recite the handoff); means associated with the subscriber unit for initiating a first control signal signifying the start of a handoff and a second control signal signifying the completion of the handoff (see col. 9 lines 23-40 where the SET control signal corresponds to

Art Unit: 2666

the first control signal and the END signal which indicates the completion of handoff corresponds to the second control signal); means for establishing a single connection governed by TCP protocols between the end user machine and the server (see abstract and col. 3 lines 33-65 which recite handoff of TCP session in a system including at least two or more devices, i.e. base stations), each byte in a succession of data packets received from the server by the end user machine causing the generation of a first actual acknowledgment signal which contains a first portion indicative of the corresponding byte and a second portion indicative of the size of the receiving window of the end user machine (see col. 3 line 66 to col. 4 line 8 and col. 9 lines 1-22 which recite the sequence number and window size being passed and col. 9 lines 23-58 and Fig. 4A which recite the TCP protocol).

Lee et al. disclose all the subject matter of the claimed invention with the exception of the first means associated with the first base station for intercepting successive first actual acknowledgment signals; means coupled to the first intercepting means and responsive to the first control signal for generating a first simulated acknowledgment signal whose first portion matches that of the then-intercepted first actual acknowledgment signal and whose second portion is zero; and means for applying

Art Unit: 2666

the first simulated acknowledgment signal to the server as in claims 1, 4, and 6-9; and means for storing the then-intercepted actual acknowledgment signal, and second means responsive to the completion of handoff for forwarding the stored actual acknowledgment signal to the first machine as in claims 2, 5-9.

Cohen from the same or similar fields of endeavor teach that it is known to provide the first means associated with the first base station for intercepting successive first actual acknowledgment signals; means coupled to the first intercepting means and responsive to the first control signal for generating a first simulated acknowledgment signal whose first portion matches that of the then-intercepted first actual acknowledgment signal and whose second portion is zero; and means for applying the first simulated acknowledgment signal to the server (see col. 3 line 3 to col. 4 line 43 which recite receiving or intercepting the acknowledgment packet, writing the acknowledgment into the table or storage and formatting or generating the ACKing packet which corresponds to the simulated acknowledgment signal including the zero count which reads on the second portion being zero). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the first means associated with the first base station for intercepting

Art Unit: 2666

successive first actual acknowledgment signals; means coupled to the first intercepting means and responsive to the first control signal for generating a first simulated acknowledgment signal whose first portion matches that of the then-intercepted first actual acknowledgment signal and whose second portion is zero; and means for applying the first simulated acknowledgment signal to the server as taught by Cohen in the communications system and method of Lee et al. The first means associated with the first base station for intercepting successive first actual acknowledgment signals; means coupled to the first intercepting means and responsive to the first control signal for generating a first simulated acknowledgment signal whose first portion matches that of the then-intercepted first actual acknowledgment signal and whose second portion is zero; and means for applying the first simulated acknowledgment signal to the server can be implemented by connecting the first means and means for generating the simulated acknowledgment signal of Cohen into the base stations of Lee et al. The motivation for providing the first means associated with the first base station for intercepting successive first actual acknowledgment signals; means coupled to the first intercepting means and responsive to the first control signal for generating a first simulated acknowledgment signal whose first portion matches that of the

Art Unit: 2666

then-intercepted first actual acknowledgment signal and whose second portion is zero; and means for applying the first simulated acknowledgment signal to the server as taught by Cohen in the communication system and method of Lee et al. being that it provides more efficiency for the system since the system can better control and administer acknowledgments in the packet communication system.

Allowable Subject Matter

7. Claim 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Farley et al. disclose alternate channel for carrying selected message types.

Farley et al. disclose packeting timeout spoofing in a wireless data communications network.

Moon discloses reducing data loss during cell handoffs.

Art Unit: 2666

La Porta et al. disclose tow phase local mobility scheme for wireless access to packet based networks.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C Hom whose telephone number is 572-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 572-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/823,288

Page 11

Art Unit: 2666

SH

A handwritten signature in black ink, appearing to be 'DM' or similar, written in a cursive style.

DANGTON
PRIMARY DIAGNOSIS